

## UHDO – AURORA Active Optical HDMI



### Description

The Tributaries AURORA cable model:UHDO is a hybrid HDMI cable designed with Optical Fiber to carry the TMDS signals and copper for the DDC line. This cable is an active HDMI cable guaranteed to pass 18Gbps data to lengths of 30 meters. The UHDO is the first Active Optical solution available that has earned the DPL Labs 18Gbps Seal of Approval. This active cable is directional

### Features

- Designed, packaged and tested in Orlando Florida, USA
- Certified HDMI High Speed to support 4K/60, Deep Color, HDR, 4:4:4 WCG and Extended Audio Channels
- Earned DPL Labs® 18Gig 4K Certification and Seal of Approval
- Available in lengths of 10 meter, 12 meter, 15 meter, 20 meter, 25 meter & 30 meter
- Optical fiber is OM3 multimode silicon glass
- 4 TMDS Signals are modulated by a 4 channel 850nm VCSEL optical converters
- Copper carries the Digital Display Channel (DDC) responsible for the 2-way communication of EDID and HDCP
- 100% tested in production and 100% tested in Orlando, FL before shipping using 4K/60, 4:4:4, 8 bit color, HDR application
- 3 Year Warranty

### Terminations

Tributaries UHDO Optical HDMI is terminated with HDMI type A connectors. Active connectors are powered by USB 2.0. USB cables are included

### HDMI Compliance

HDMI ATC Certification	Category 2 / High Speed with Ethernet
Certified Data Rate	3.4Gbps / 10.2Gbps (4K UHD)
Supported Clock Rate	340Mhz

### Conductors

PIN	DESCRIPTION	Conductor
Pin 1	TMDS Data 2+	OM3 Optical fiber
Pin 3	TMDS Data 2-	OM3 Optical fiber
Pin 4	TMDS Data 1+	OM3 Optical fiber
Pin 6	TMDS Data 1-	OM3 Optical fiber
Pin 7	TMDS Data 0+	OM3 Optical fiber
Pin 9	TMDS Data 0-	OM3 Optical fiber
Pin 10	TMDS Clock+	OM3 Optical fiber

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Pin 12	TMDS Clock-	OM3 Optical fiber	
Pin 15	I <sup>2</sup> C Serial Clock for DDC	28 AWG HC-OFC	Polypropylene
Pin 16	I <sup>2</sup> C Serial Data Line for DDC	28 AWG HC-OFC	Polypropylene
Pin 18	+5V Power	28 AWG HC-OFC	Polypropylene
Pin 17	DDC/CEC Ground/HEAC Drain	30 AWG BC	
Pin 19	Hot Plug Data / HEAC-	28 AWG HC-OFC	Polypropylene

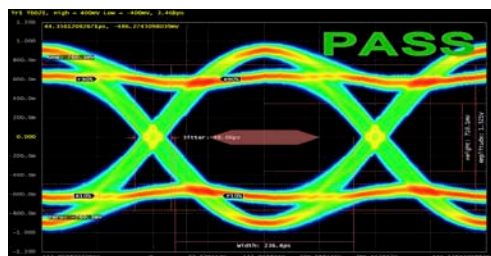
### Cable Shielding

Aluminum Mylar Facing Outside	100% Coverage 25% overlap
Braided Shield	85% Coverage / Tinned Bare Copper Wire

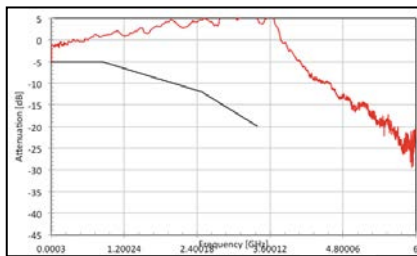
### Jacket

Color	Black
Material	PVC – Polyvinyl Chloride
Outside Diameter	4.2 mm
UL Listing	AWM Appliance wiring UL CMG
EU RoHS Compliant (Y/N)	YES

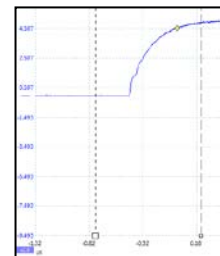
### Testing Data



18Gbps Eye Pattern



18Ghz Attenuation



Rise Time

### Electrical

Impedance	100Ω +/- 10%
Attenuation	28AWG = 4.125Ghz~5.1Ghz 42dB
Optical	OM3 10gig

### Application Specifications

Max Video Format Supported	2160p (UHD/4K) HDR, WCG 8-bit 4:4:4, 18Gbps
VESA Graphics	Supports as defined by HDMI specification
3D Video	Supported / System Dependent
Audio Formats Supported	32Ch, PCM 2.0, DTS 7.1, 3D Audio / System Dependent

### Notes

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## **UHDO – AURORA Active Optical HDMI**

While Tributaries has made every reasonable effort to ensure the accuracy of these specifications, information contained herein may be subject to error and omission and to change without notice. Tributaries provides these specifications on an “AS IS” basis, with no representations or warranties, whether express, statutory or implied.

The cable will be packaged to preclude the inducement of damage due to handling and transportation, and will be in accordance with the best commercial practices available. Shipping containers will be constructed as to eliminate any possible damage to the cable due to shipment.

### **Stock Models**

<b>Stock Code</b>	<b>Description</b>	<b>Color</b>	<b>Quantity</b>
UHDO-100B	AURORA Active Optical Hybrid UHD HDMI Cable 10m bag	Black	Each
UHDO-120B	AURORA Active Optical Hybrid UHD HDMI Cable 12m bag	Black	Each
UHDO-150B	AURORA Active Optical Hybrid UHD HDMI Cable 15m bag	Black	Each
UHDO-200B	AURORA Active Optical Hybrid UHD HDMI Cable 20m bag	Black	Each
UHDO-250B	AURORA Active Optical Hybrid UHD HDMI Cable 25m bag	Black	Each
UHDO-300B	AURORA Active Optical Hybrid UHD HDMI Cable 30m bag	Black	Each